ARTIFICIAL AND SUN LIGHT ON COLOR.

BY A. CURTIS BOND.

ILLUSTRATION TO ZOLA'S "LE REVE," DRAWN BY G. JEANNIOT.

IT is not the adjustment of colors and tones of colors to the natural light of day, as it enters or declines to enter an apartment alone, that exerts any considerable uncertainty in the mind of a decorator; there are readily understood laws governing that, and they work with the regularity of the rise and setting of the sun. Where the brilliant rays come through an eastern window, where the diverse brightness and shadows of a southern exposure are regular in their uncertainty, or where the steady, stable, permanent light of a north portal is encountered, provision is readily made, for the requirements of such conditions are generally understood.

Artificial light is the cause of more uneasiness and more uncertainty than the aggregation of other obstacles mural painters have to contend against. Gas, candle and oil light each has its own and peculiar effect, and in the presence of them not merely gradations of colors are changed, but body colors themselves are often so radically altered as to lose their original individuality, and thus reverse the purpose and harmony of the artist, and reduce to obnoxiousness the good taste of the furnisher.

There is something more than satire in the proposition of Mrs. Haweis that a lady should dress up to her furniture; the violent and shocking contrast of a purple robe against a blue sofa, for instance, would be calculated to detract from the personal attractiveness of the woman herself, and create a color horror repugnant even to those who could not comprehend its cause. So with blue furniture a judicious housekeeper would eschew purple dresses.

But the error of the furnisher might be innocently made; he might select the colors of his upholstery that would harmonize with the colors of the walls by day, but would be as widely divergent and as incongruous by night before the yellow tone of gas or lamp, as were the lady's costume. Let the experience of an expert in color, as I learned it in a recent interview, be a guide to those who would adorn their own homes or whose business it is to adorn the homes of others.

The condition of sunlight affects colors to a greater or less degree; the position of the sun in the heavens, and the manner of its entrance into the apartment must be considered in estimating its results. In coming through a curtain it naturally takes the tone of the material of which the curtain is constructed, while in penetrating the glass simply, it is infused with a reddish tinge that later takes a bluish violet as the sun declines toward evening.

A red flower upon a green ground will assume the brilliancy of a tongue of flame at a short distance, and will thereby enliven whatsoever may be closely around it. This is upon the same principle that a black bull's-eye on a white target will appear much blacker than it really is, on account of its immaculate setting.

In the contemplation of a checker-board when placed a few feet from us, the ebony squares apparently stand in high relief. This same effect is noticed in a black and white floor, and the sensation produced upon the mind is not an agreeable one.

And this, particularly prominent in black and whites is also noticed in other combination of colors, the lighter colors invariably appear to us much lighter than reality, and likewise appear nearer to us than they actually are, the darker recedes on account of its accumulated depth of tone, and leaves the impression on the eye of a vacancy.

Small squares of red and blue combined in any form of decoration, whether it be a flooring, wall panel, or sofa cover, if done without having a frame around each or a division line of some distinctive character between them, become not only unpleasant to the eye by their violent abruptness, but are positively injurious.

Under artificial light ultramarine becomes almost black, ciel blue under the same condition gathers brightness and becomes more brilliant, while many shades of blue and green can not be distinguished from each other under this artificial illumination. The background upon which the colors are laid has a great influence upon this liability to changeableness beneath gas or lamp light; this is especially the case with velvet, satin, wool or cotton materials.

The names of colors are so indefinite, various and capricious, and the human eye so readily deceived in its recognition and identification of the colors, that any attempt at a complete list of the shades and their many phases would be almost hopeless. I can only offer the suggestion as a worthy and valuable caution that no color decoration be chosen entirely by daylight alone, but rather that the selection be divided between sunlight and gaslight, that the frescoer be required to study the salon at night as at morning, that the furniture dealer be required to display in the evening the richly beautiful upholsteries he offered in the afternoon.

The safest all-around color for every hour is the color of harmony, brown, for the reason that almost every other color embraces in itself a tone of brown. Those portions of the room that are in shadow always have a certain touch of brown, while wine red, India red, olive green and sea blue, have a brown tint even under the brightest light. A room having brown parquet flooring, natural wainscoting to the ceiling, a wooden ceiling, brown leather furniture, wrought iron chandeliers and bright brass and bronze ornaments, would always look cheerful, and gas light has the effect of hightening its value.

As I said, there are many inexplicable peculiarities concerning the changeful quality of colors with the artificial light. Here is a marked peculiar example, and it may be readily tested by the reader. In an otherwise dark room, if a person by the light of a lamp or candle, fixes the eye intently on a colored object differing in tone from those around it, and then suddenly looks in the direction of the darkness, the eye will bear with it the impression of the colored object, and it will appear to be stamped in all its detailed outlines upon the gloom and as realistically perceptible as in nature itself. But the spectre seems to be impregnated with colors entirely different from the original; what was green in reality appears now to be red, the yellow a bluish violet, the white portions become gray, and on the other hand the gray parts become white, the bluish violet becomes yellow, the red, green, in other words every color changes to its complement.

For the information of the layman, here are a few of the prominent colors and their complements:

Light carmine red,	=	dark bluish green.	Light orange,	=	ultramarine.
Dark " "	=	light " "	Light yellow,	=	dark blue violet.
Light cinnabar red,	=	dark cyanogen blue.	Light yellowish green,	=	dark purple violet.

The decorator of the human form, the maker of dresses, robes, and the like, has his rules also for the combinations of evening colors and one with whom I talked, gave me this schedule which may be more variously applied than to the limited exigencies of

his profession. A highly colored and flushed face should surmount on ivy green costume; a light, rosy complexion is best set off by peacock green; a tanned skin is toned by a violet blue; golden blonde hair, a deep sky blue; dark brown hair, a light sea green; in all these or other combinations it must be borne in mind that the dark makes the neighboring colors brighter, the blue makes them more yellow and the green more red.

It is a mistake that a room has merely to be white in order that it may be pretty under light. In rococo or Louis XVI decoration, it is the shadows resulting from the relief framings, scrolls and grotesque figures that pleasantly heighten the effect; it is not the white ground.

In a room where the prevailing tone is green, an addition of brown and white is productive of desirable effects by artificial lights.

Golden yellow looks well under any light and is practically unchangeable; canary or sulphur yellow are not desirable because they become colorless in presence of certain light. Old gold furniture is well adapted to highly illuminated rooms; in those of less illumination the old gold becomes tarnished.

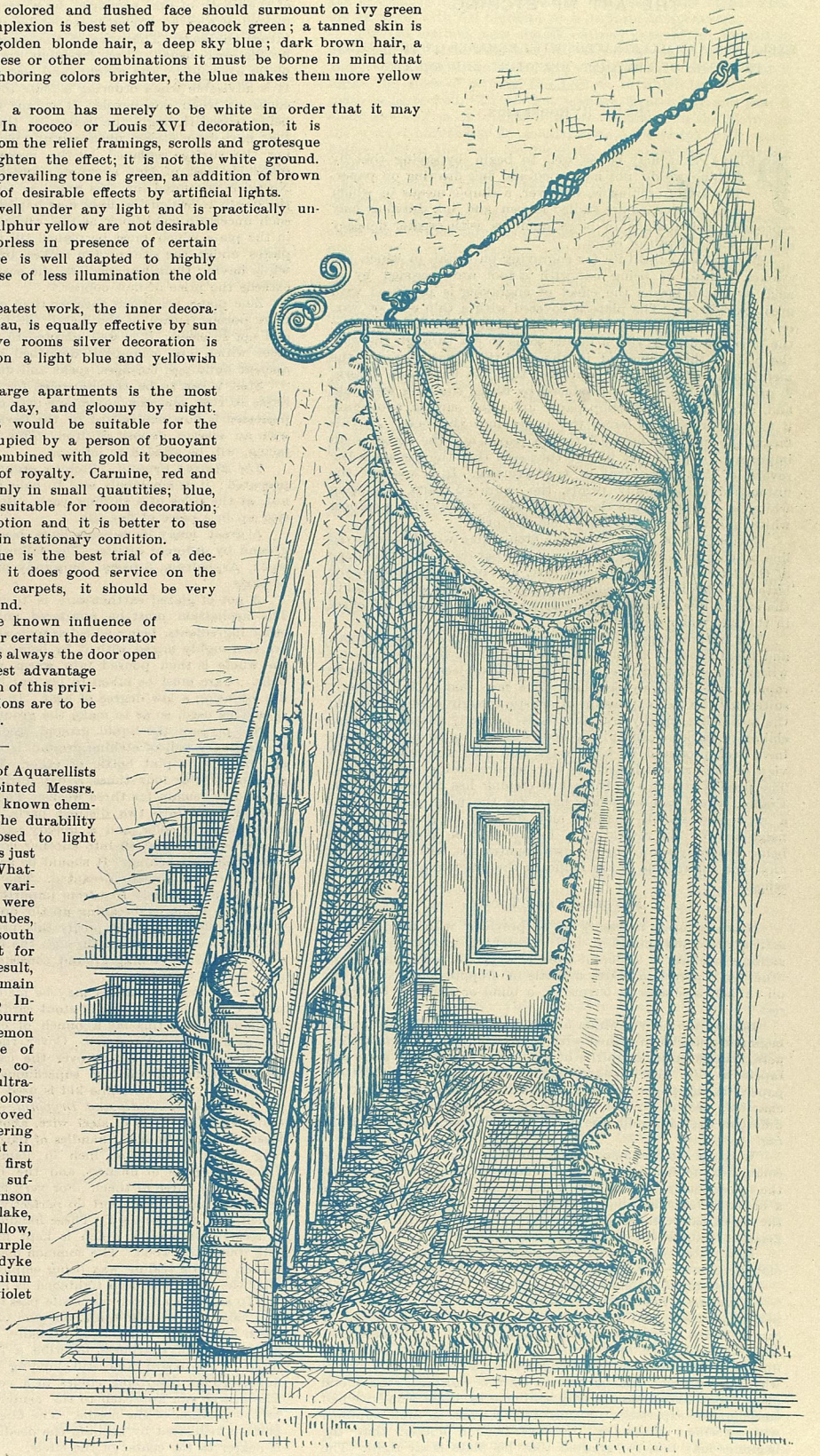
Francois Cuvilliés' greatest work, the inner decoration of the Aurelia Chateau, is equally effective by sun or artificial light; in five rooms silver decoration is exclusive, being laid upon a light blue and yellowish brown ground.

Red and black for large apartments is the most dignified and stately by day, and gloomy by night. Combined with white it would be suitable for the decoration of a room occupied by a person of buoyant disposition and spirits; combined with gold it becomes the pretentious attribute of royalty. Carmine, red and purple should be used only in small quantities; blue, red and violet are not suitable for room decoration; they are the colors of motion and it is better to use them in costumes than in stationary condition.

The artistic use of blue is the best trial of a decorator; in the evening it does good service on the ceiling, while if used in carpets, it should be very dark and only as a ground.

Whatever may be the known influence of light on color, and, however certain the decorator may be of results, there is always the door open for a trial, and the fullest advantage might be judiciously taken of this privilege when new combinations are to be tried, or old ones doubted.

THE English Society of Aquarellists some two years ago appointed Messrs. Russell & Abbey, two well known chemists, to experiment upon the durability of water colors when exposed to light and air. Their report has just been made. Strips of Whatman's paper, covered with various colors and mixtures, were enclosed in thin glass tubes, fixed against a wall facing south and exposed to the light for twenty-one months. As a result, only the following colors remain unchanged: Yellow ochre, Indian red, Venetian red, burnt sienna, chrome yellow, lemon yellow, raw sienna, oxide of chromium, Prussian blue, cobalt, French blue and ultramarine ash. Of the other colors experimented with none proved absolutely permanent, suffering to a greater or less extent in the following order, the first named being the one that suffered least: Carmine, crimson lake, madder red, scarlet lake, Payne's gray, Naples yellow, olive green, indigo, purple madder, gamboge, Vandyke brown, Indian yellow, cadmium yellow, Leitch's blue, violet carmine, purple carmine, sepia, aureoline, rose madder, permanent blue, Antwerp blue, madder lake, vermilion, emerald green and umber. Of thirty-four mixtures tried only three were unaltered.



SUGGESTION FOR DIVISION OF HALL, BY EDWIN F. ASHMAN.